

UHER RECEIVER *132*

RG350

**STEREO
SYNTHESIZER
RECEIVER**

SERVICE MANUAL

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SPECIFICATIONS

AUDIO SECTION

Sensitivity

Input: 1000Hz	
Phono(MM)(at Rec out)	3.0mV/50k Ω /220pF
Aux	150mV/50k Ω /2200pF
Tape monitor	150mV/50k Ω /2200pF

Sensitivity channel difference . . \pm 2dB

Output power 38W

Input: Aux

Output: 0.08%THD at 8 Ω

50-20000Hz continuous

both ch. driven

Headphone output

Input: 1000Hz 480mV/8 Ω

Phono 3.0mV Aux 150mV

Output: At speaker output

Rec. output

Input: 1000Hz 150mV/100k Ω

Aux 150mV 150mV/100k Ω

(At speaker output with

Volume: 3.5W)

IM Distortion factor

Input: Aux 70Hz: 7000Hz/4:1

Output: 35W(47Vp-p) 0.03%

Sinus power (1kHz)

at 8 Ω 0.08%THD 46W

both ch. driven

Music power

at 8 Ω 10%THD 88W

at 4 Ω 10%THD 106W

F.T.C. power (50-20000Hz)

at 8 Ω 0.08%THD 38W

Frequency response

Input: Aux. Tape monitor

Output: 1000Hz 36W -6dB

from Volume max. \pm 3dB . . . 10 - 35,000Hz

Phono mag equalizer response

Input: Phono

Output: RIAA \pm 1.0dB 30 - 20,000Hz

Tone control action

Input: Aux

Output: 1000Hz 0.775V

Boost: 100/10000Hz +9.0dB

Cut: 100/10000Hz -9.0dB

Loudness control action

Input: Aux 150mV

Output: -30dB Att. from

Volume max. (Loudness
switch: on)

100Hz +9dB

10000Hz +6dB

Maximum input signal

Input: 1000Hz

Output: 3.5W

Phono 130mV

Aux 4.0V

Tape monitor 4.0V

Low & High filter

Input: Aux 20Hz, 10kHz

Output: 35W -6dB from

Volume max. (filter switch:

on) -6dB

Signal to noise ratio

(IHF-A Network)

Phono Input: 5mV

Output: Tape out 78dB

Aux: Input short 92 dB

Tape monitor: input short . . . 92dB

Residual noise 0.5mV

Damping factor

Input: Aux 1000Hz

Output: 3.5W 30 -

Volume control tracking error . . 4dB

Input: Aux

Output: 3.5W at volume max.

-40dB

Crosstalk

Output: 3.5W (with Volume)

Aux: Input/150mV

1000Hz 60dB

20kHz 33dB

Phono input/3.0mV

1000Hz 55dB

Output level difference 3dB

Input: 1000Hz

Aux: 150mV

Phono 3.0mV

Output: 10'clock position of

volume control

AM SECTION

Tuning cover range 522 - 1611kHz

IHF usable sensitivity 250 μ V/m

at 1000kHz

Signal to noise ratio 42dB

Input: 5mV/m

IHF selectivity \pm 9kHz 36dB

Input: 1000kHz

AGC figure of merit 48dB

Input: 1000kHz, 10mV/m

THD 0.5%

Input: 1000kHz, 5mV/m

IF rejection at 1000kHz 58dB

Image-rejection at 1000kHz . . . 40dB

Frequency response -3dB

Input 1000kHz 5mV/m

80 - 2000Hz

Whistle modulation of 2nd or 3rd

2 IF 500 μ V/m to 10mV/m . . . 15%

5mV/m . . . 8%

3 IF 500 μ V/m to 10mV/m . . . 10%

5mV/m . . . 5%

FM SECTION

Tuning cover range 87.5 – 108MHz
 Usable sensitivity for 26dB S/N . 1 μ V
 (Antenna 75 Ω 40kHz dev.)
 50dB Quieting 2.5 μ V
 Signal to Noise Ratio 75dB
 Input 1.1mV 98MHz
 Audio frequency response 40 – 15000Hz
 Input 1.1mV 98MHz
 THD 0.1%
 Input 1.1mV 98MHz
 Capture ratio 2dB
 Input 1.1mV 98MHz
 IHF adjacent channel selectivity 70dB
 Input 110 μ V 98MHz
 Spurious response 60dB
 Input 1.1mV 98MHz
 Frequency 10 – 200MHz
 (Except generator harmonics)
 IF rejection 90dB
 at 90MHz
 Image rejection 45dB
 at 106MHz
 AM suppression 55dB
 AM: 400Hz 30% mod.
 Input 1.1mV 98MHz
 FM muting sensitivity 10 μ V

Input 98MHz

Output 20dB Attenuation

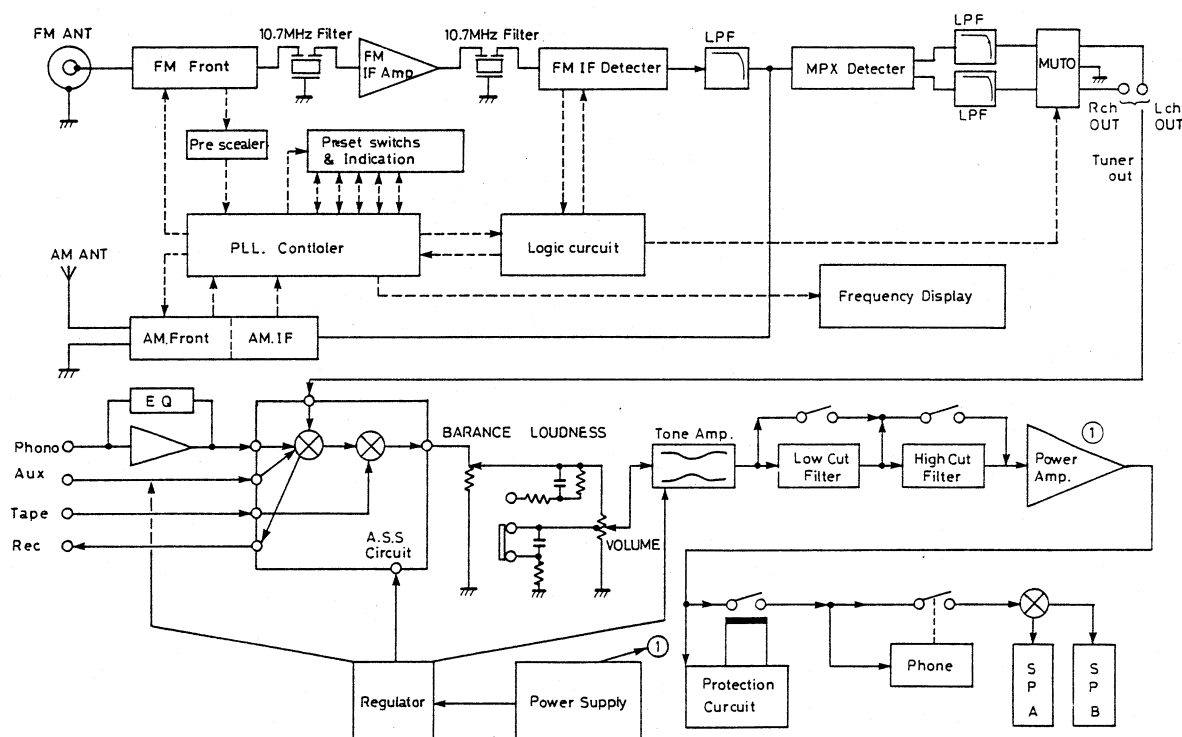
FM MPX SECTION

50dB Quieting 50 μ V
 Stereo distortion 0.2%
 (without 19 & 38kHz)
 Input 1.1mV 98MHz
 Stereo indicator sensitivity 10 μ V
 Input 98MHz
 Separation
 (without 19 & 38kHz)
 Input 1.1mV 98MHz
 1000Hz 45dB
 10kHz 35dB
 Channel gain difference. 0.5dB
 Subcarrier product ratio 50dB
 Input 1.1mV 98MHz
 SCA suppression 60dB

GENERAL

Maximum power consumption . 380W
 AC power supply 220V 50Hz
 Weight and Dimensions (Approx.)
 Net weight 7.0kg
 Gross weight 8.0kg
 Dimension (W/H/D) 422/115/347mm

Specifications and design are subject to change without notice.

BLOCK DIAGRAM

DISASSEMBLY

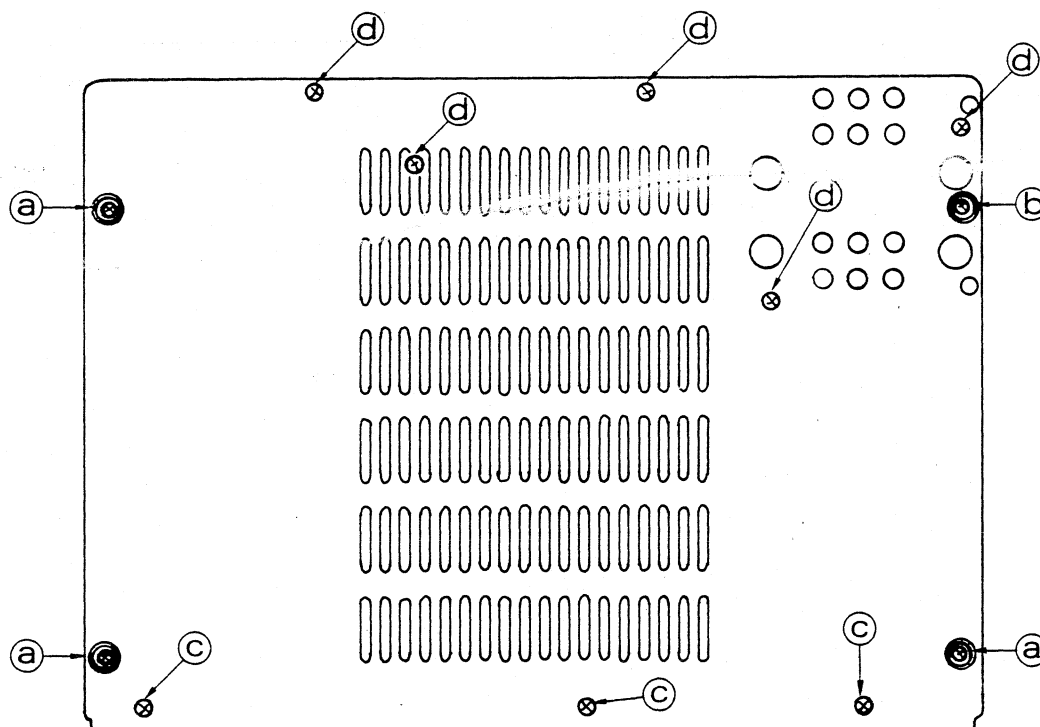
1. CABINET REMOVAL

- Remove 4 screws from both sides of the cabinet. (TSB+40x08-N)
- Remove a screw from rear of the cabinet. (TSC+30x08-N)
- Lift the cabinet away from the unit.

2. BOTTOM BOARD REMOVAL

(cf. below)

- Remove 3 screws with foots from bottom board. (TSB+40x14-Y)
- Remove a screw with foot from bottom board. (TSC+30x08-N)
- Remove 3 screws from front side of bottom board. (TPS+30x08-N)
- Remove 5 screws from bottom board. (TSC+30x08-N)



ALIGNMENT PROCEDURE

Condition

AM

1. Modulation: 1kHz at 30%
2. Generator output is terminated in an IRE Loop 24 inch spacing.

FM

1. Connect signal generator to FM ext. antenna terminal through 75 Ω unbalanced dummy antenna.
2. Modulation: 1kHz 75kHz deviation.
3. FM muting switch: OFF

FM MPX

Modulation: 1kHz L or R channel only.

Main carrier (L + R) 33.7kHz deviation

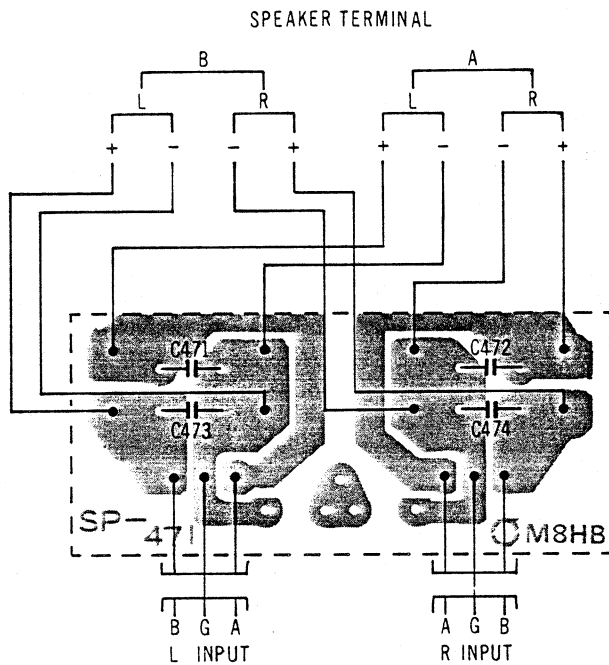
Sub carrier (L - R) 33.7kHz deviation

19kHz pilot 7.5kHz deviation

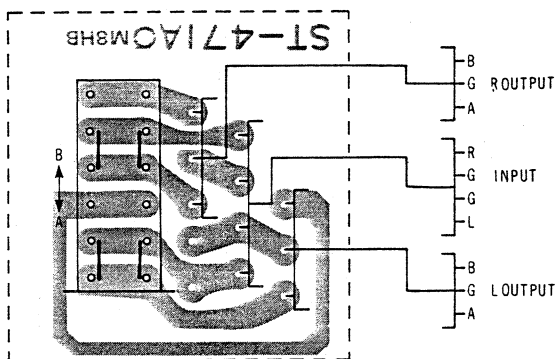
Step	Signal, Sweep Generator		Tuner IND Setting	Output Indicator Connection	Adjustor	Adjust for
	Connection	Frequency				
AM IF						
1	Set the FUNCTION Selector to "AM".					
2	To IRE Loop placed at a distance of 60cm from built-in bar-antenna	452kHz	Low end	<u>IF sweep generator</u> TP (R253)	T251 T250	Flat and max.
AM TUNING VOLTAGE						
3			522kHz	<u>digital voltmeter</u> TP (R411)	T201	2.7V
4			1611kHz	SAME AS STEP (3)	CT202	20.0V
5	Repeat steps (3) and (4).					
AM RF						
6	SAME AS STEP (2)	603kHz	603kHz	<u>RF sweep generator</u> TP (R253)	L201	Max.
7	SAME AS STEP (2)	1404kHz	1404kHz	SAME AS STEP (6)	CT201	Max.
8	Repeat steps (6) and (7).					
AM TUNED						
9	SAME AS STEP (2)	999kHz (66dB)	999kHz	TUNED IND.	SVR251	all segments just light up
FM TUNING VOLTAGE						
10	Set the FUNCTION selector to "FM".					
11			87.5MHz	<u>digital voltmeter</u> TP (R411)	L103	3.9V
12			108.0MHz	SAME AS STEP (11)	CT103	25.0V

Step	Signal, Sweep Generator		Tuner IND Setting	Ouput Indicator Connection	Adjustor	Adjust for
	Connection	Frequency				
FM IF						
13			98MHz	<u>frequency counter</u> TP (R155)	CT431	108.700MHz
14	To FM antenna terminal through 75Ω dummy	98MHz (60dB)	98MHz	<u>digital voltmeter</u> TP (R155)	T151 (1)	0±0.005V
15	SAME AS STEP (14)			<u>distortion meter</u> output terminals	T151 (2)	Min. distortion
16	Repeat steps (14) and (15)					
FM RF						
17	SAME AS STEP (14)	90MHz	90MHz	<u>RF sweep generator</u> TP (R154)	L101 L102 T101	Max.
18	SAME AS STEP (14)	106MHz	106MHz	SAME AS TEP (17)	CT101 CT102 T101	Max.
19	Repeat steps (17) and (18).					
FM SIGNAL LEVEL						
20	SAME AS STEP (14)	98MHz (46dB)	98MHz	SIGNAL METER	SVR202	All segments just light up
FM MUTING LEVEL						
21	SAME AS STEP (14)	98MHz (25dB)	98MHz	<u>Scope</u> Output terminals	SVR201	Output wave disappears (MODE SW at pro- truded position)
FM MPX/STEREO SEPARATION						
22				<u>Frequency counter</u> TP4 (R403)	SVR401	19±0.05kHz
23	SAME AS STEP (14)	98MHz (60dB)	98MHz	<u>VTVM</u> Output terminals	SVR402	Min.

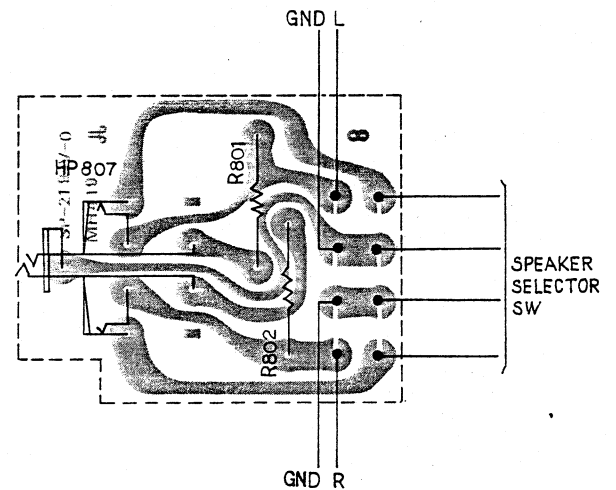
SP. TERMINAL P.C. BOARD



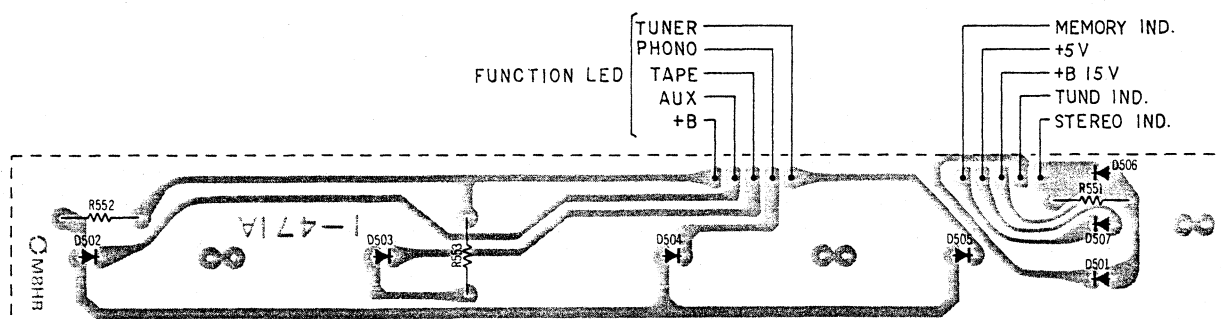
SP. SW. P.C. BOARD



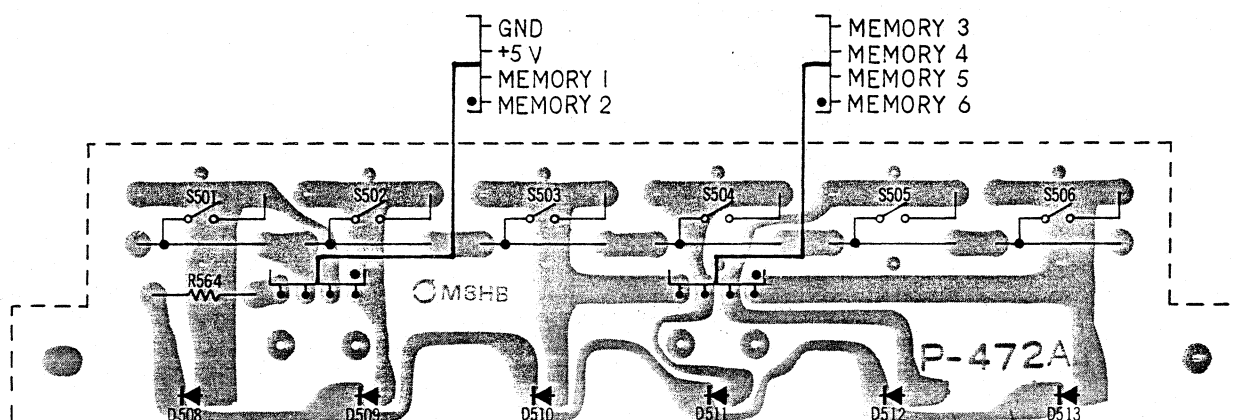
HP. P.C. BOARD



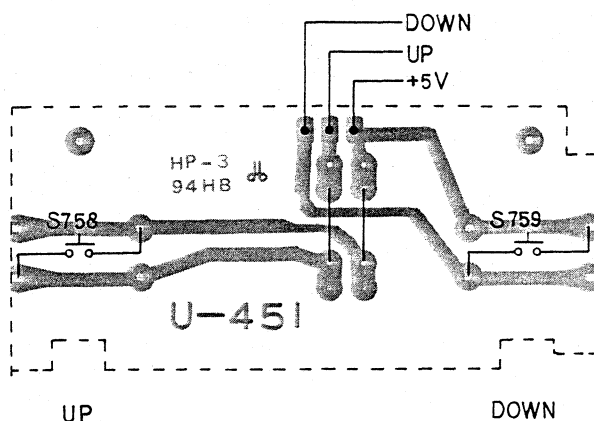
FUNCTION LED P.C. BOARD



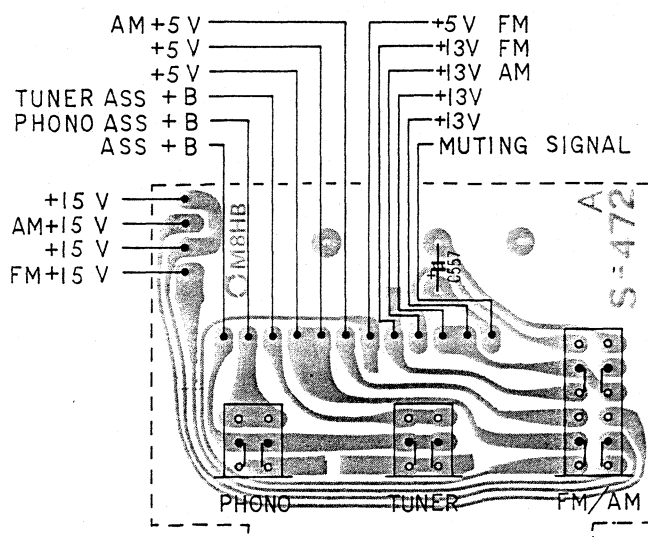
PRESET SW. P.C. BOARD



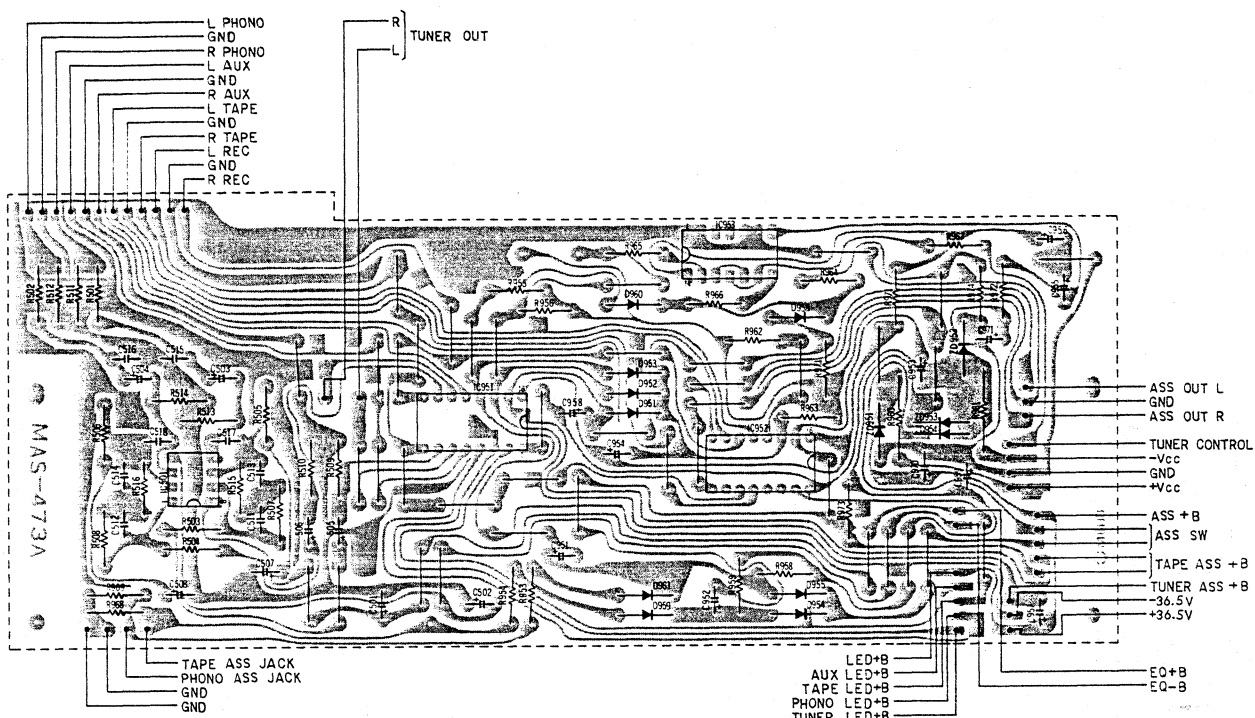
UP-DOWN P.C. BOARD



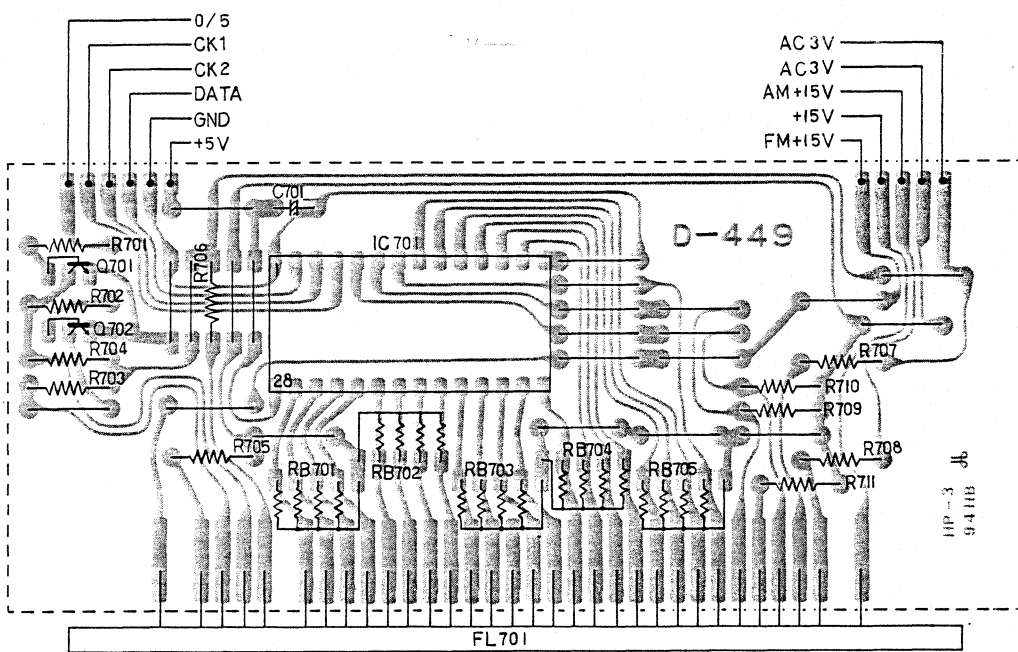
FUNCTION SW. P.C. BOARD



AUTO SWITCHING SYSTEM P.C. BOARD



FREQUENCY DISPLY P.C. BOARD



POWER SW

LINE CORD

BROWN
ORANGE
RED
BLACK
YELLOW

P. Transformer

F801

C801

L IN
L GND
R GND
R IN

TUNER Control

36.5V
36.5V
AC 29.4V

ASS POWER SOURCE
P. Transformer

GND
P. Transformer

GND
+5V MUTING

P. Transformer

+13V TUNER
+5.5V

+15V

+28.7V

AC 3V
GND

F.L.

YELLOW
WHITE
YELLOW

AC 3V
P. Transformer

L SP OUT
L GND
R GND
R SP OUT

C425
C426

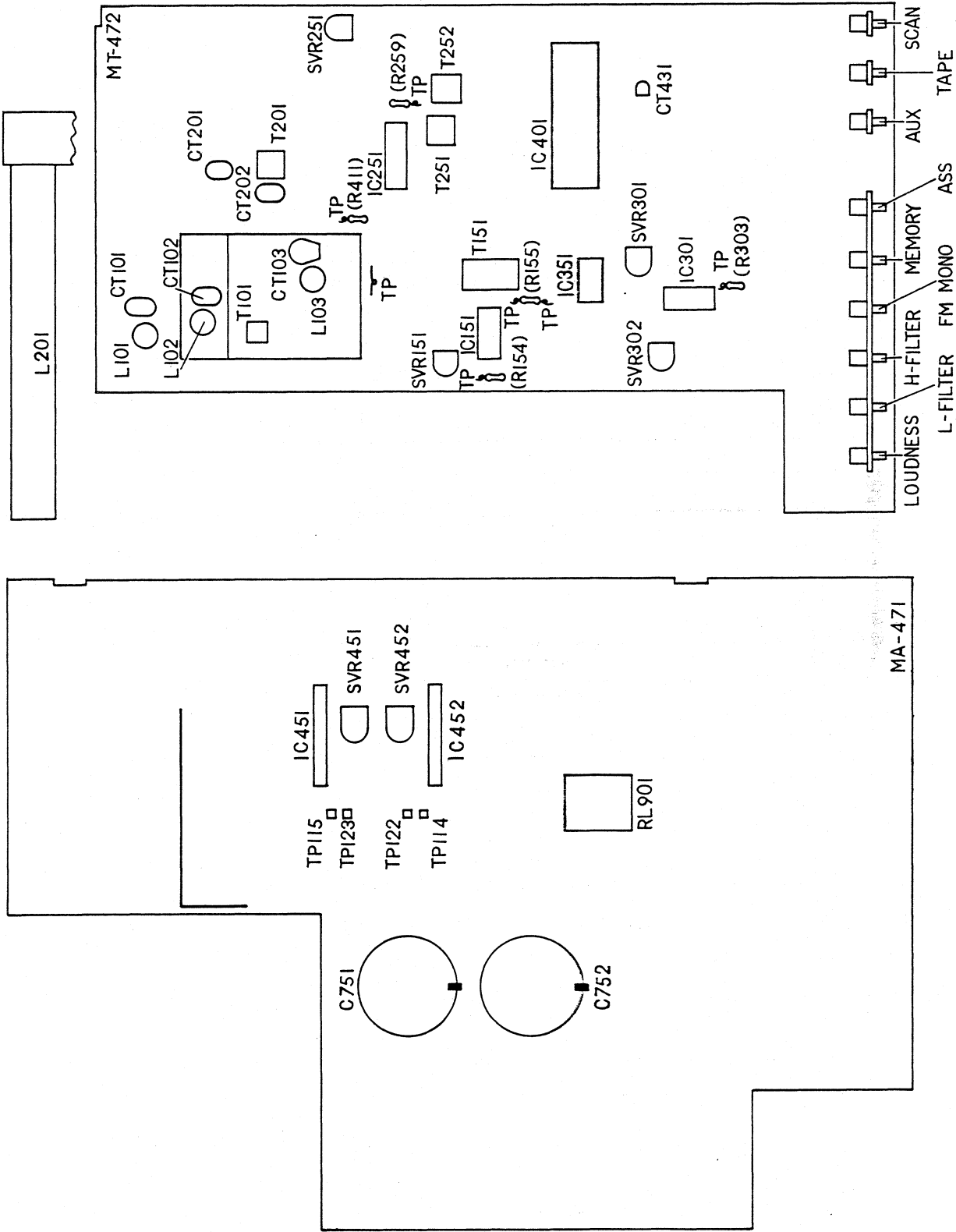
L OUT
GND
R OUT
L IN
L OUT
GND
R OUT
R IN

VOLUME
TAPE
TREBLE
BASS

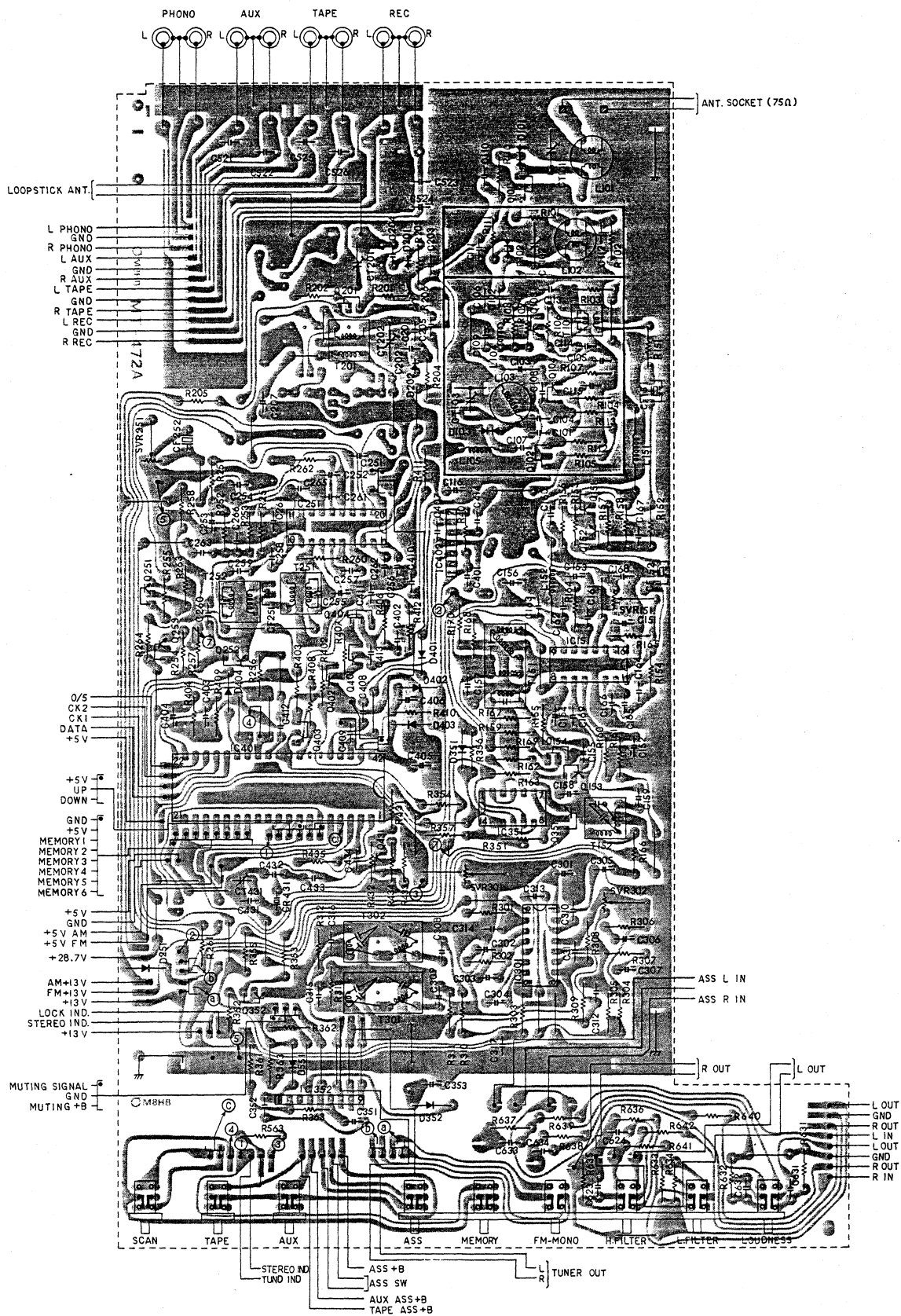
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VR604

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ALIGNMENT COMPONENTS LAYOUT



TUNER & FUCTIONS SW. P.C. BOARD



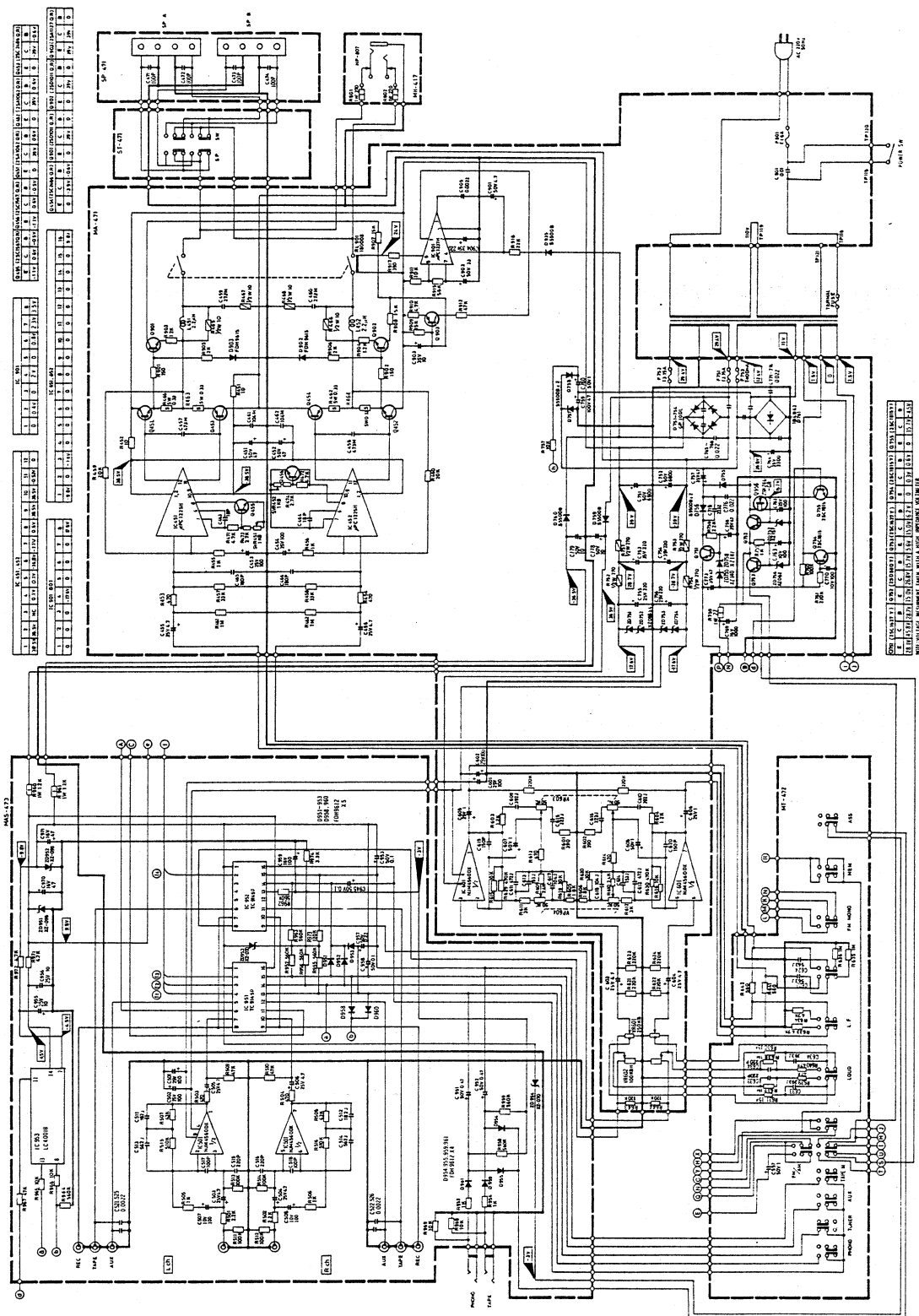
PARTS LIST

Part No.	Description	Symbol No.	Q'ty	Part No.	Description	Symbol No.	Q'ty
2SA1062-Q, R	Transistor	Q451, 452	2	SFU450B3	Ceramic filter	CF251	1
2SA1127-Q, R	Transistor	Q903	1	HC18/U7.199MHZ	Quartz oscillator unit	CR431	1
2SC1567-Q, R	Transistor	Q455, 456	2	EWGG0A013C54	Potentiometer	VR603, 604	2
2SC1627A-Y	Transistor	Q751, 753	2	EWGG0A013375	Potentiometer	VR602	1
2SC1815-GR	Transistor	Q251, 252	2	EWK8CA013BF5	Potentiometer	VR601	1
2SC1815-Y	Transistor	Q153, 351, 352	11	ESB827S	Power switch		1
		401~403, 431		ESB62372	Push switch		1
		701, 702, 754		ESB6251	Push switch		1
		755		ESB6253	Push switch		4
2SC2486-Q, R	Transistor	Q453, 454	2	ESB6262	Push switch		1
2SC2668-O	Transistor	Q103, 104	2	SW-1401106	Push switch		1
2SC2669-O	Transistor	Q151, 152	2	EVQQQR04K	Light-touch switch	S501~506, 758	8
2SC2878-B	Transistor	Q253	1			759	
2SD1011-Q, R	Transistor	Q901, 902	2	7-MT-08ZK	Fluorescence lamp	FL701	1
2SD880-Y	Transistor	Q752	1	AJC-002-AAB	RCA jack 4P		2
2SK161-GR	Transistor	Q102, 201	2	HLJ0307-01-040	H.P. jack	HP401	1
2SK241-GR	Transistor	Q101	1	HSJ0780-01-010	MIC jack		2
2SK246-GR	Transistor	Q756	1	FUH-002	Fuse holder		8
2SK246-Y	Transistor	Q154	1	TCP9106-01-101	Socket, co-axial		1
2SK301-Q	Transistor	Q404	1	PT-S08P12	Socket 8P (S.P.)		1
FDH9612	Diode	D251, 352, 404,	12	MC02-185	Micro socket ass'y		1
		951~955		MC03-188	Micro socket ass'y		1
		958~961		MC04-182	Micro socket ass'y		1
FDH9615	Diode	D401, 402, 551,	5	MC04-187	Micro socket ass'y		1
		901, 902		MC05-184	Micro socket ass'y		1
OA99	Diode	D351	1	MC05-186	Micro socket ass'y		1
S5500B	Diode	D755~760, 903	7	MC05-192	Micro socket ass'y		1
XZ062	Diode	ZD756	1	MC06-183	Micro socket ass'y		1
XZ070	Diode	ZD953, 954	2	MC12-181	Micro socket ass'y		1
XZ088	Diode	ZD751~754	4	171825-12	Micro Plug		1
XZ098	Diode	ZD951, 952	2	171825-2	Micro plug		1
XZ140	Diode	ZD755	1	171825-3	Micro Plug		1
XZ147	Diode	ZD758	1	171825-4	Micro plug		2
XZ157	Diode	ZD757	1	171825-5	Micro plug		2
1B4B42	Diode	D761	1	171825-6	Micro plug		1
1SV1020, L	Diode	D201, 202	2	171826-5	Micro plug		1
1SV103A	Diode	D103	1	1MSA-1068-12D	Mini terminal plate		1
1SV103A, B	Diode	D101, 102	2	NPT-1345S	Power transformer		1
GP30D-L	Diode	D751~754	4	FU-521628T	Fuse	F754	1
1N4002	Diode	D403	1	FU-523128T	Fuse	F751, 752	2
GL9NG33	LED	D501	1	FU-524018T	Fuse	F753	1
GL9PR33	LED	D502~513	12	N43040	ANT. terminal		1
N0.18E	MICA	for Q451~454	4	RP-001	Terminal pin		27
N0.24B	MICA	for Q451~454	4	UB-0027	Terminal (GND.)		1
AN7470	IC	IC301	1	ANT-011	FM lead antenna		1
LA1231NS	IC	IC151	1	PC-012	RCA pin cord ass'y		2
LA1245	IC	IC251	1	D-449	Printed circuit board		1
LC4001B	IC	IC953	1	HP-471	Printed circuit board		1
LC4011B	IC	IC351	1	MA-471	Printed circuit board		1
NJM4560DX	IC	IC501, 601	2	MAS-473	Printed circuit board		1
TA7324P	IC	IC352	1	MH-419	Printed circuit board		1
TA9145P	IC	IC951, 952	2	MT-472	Printed circuit board		1
TC9147P	IC	IC401	1	P-472	Printed circuit board		1
TD6104P	IC	IC402	1	S-472	Printed circuit board		1
TD6301AP	IC	IC701	1	SP-471	Printed circuit board		1
UPC1225H	IC	IC451, 452	2	ST-471	Printed circuit board		1
UPC1237H	IC	IC901	1	U-451	Printed circuit board		1
104001	Air-core coil	L451, 452	2	180008	Relay	RL901	1
100024	Inductor	L104, 105	2	KA25ST100J	Carbon resistor	R451, 452	2
100025	Inductor	L151, 152	2	KA25ST101J	Carbon resistor	R258	1
127009A	FM RF coil	L101, 102	2	KA25ST102J	Carbon resistor	R106, 253, 302	14
140045	AM IFT	T251	1			352, 411, 455	
140046	AM IFT	T252	1			456, 505, 506	
141021	FM IFT	T151	1			563, 564, 755	
141028	FM IFT	T101	1			953, 954	
143012	Filter coil	T152	1			R165, 251, 252	17
143013	Filter coil	T301, 302	2	KA25ST103J	Carbon resistor	306, 307, 354	
135016	MW OSC coil	T201	1			356, 406, 408	
190014	FM OSC coil	L103	1			615, 616, 757	
125022	Loopstick ANT.		1			911, 965, 966	
BFU450K	Ceramic filter	CF252	1			968, 969	
KBF10.7MT-NAR	Ceramic filter	CF151	1				
KBF10.7MU-NA6R	Ceramic filter	CF152	1				

PARTS LIST

Part No.	Description	Symbol No.	Q'ty	Part No.	Description	Symbol No.	Q'ty
KA25ST104J	Carbon resistor	R110~112, 163 170, 254, 255 261, 351, 355 401, 403, 404 511~514, 702 760	19	SA-1WT270J	Metal oxide resistor	R759	1
KA25ST105J	Carbon resistor	R162, 257, 461 462, 635~638	8	SA-1WT271J	Metal oxide resistor	R419, 420	2
KA25ST122J	Carbon resistor	R361, 603, 604 903, 904	5	MPC722R33KX2LF	Cement resistor	R463, 464	2
KA25ST123J	Carbon resistor	R169, 431	2	SVR-08T3B102	Semi-variable resistor	SVR451, 452	2
KA25ST124J	Carbon resistor	R643, 644, 973	3	SVR-08T3B204	Semi-variable resistor	SVR302	1
KA25ST151J	Carbon resistor	R901, 902	2	SVR-08T3B303	Semi-variable resistor	SVR151, 251	2
KA25ST152J	Carbon resistor	R107, 156, 260	3	SVR-08T3B502	Semi-variable resistor	SVR301	1
KA25ST153J	Carbon resistor	R157, 301, 432 631, 632 907~909	8	RK1/8B4562K	Networks resistor	RB701~705	5
KA25ST181J	Carbon resistor	R407	1	LUB1H682MHS	Electrolytic capacitor	C751, 752	2
KA25ST182J	Carbon resistor	R167, 256, 605 606	4	LL-25TW4R7M	Low leak. Electrolytic cap.	C455, 456 503~506, 603 604	8
KA25ST202J	Carbon resistor	R905, 906	2	LL-50TW1R0M	Low leak. Electrolytic cap.	C605~608	4
KA25ST203J	Carbon resistor	R459, 460	2	MS-10TW101M	Electrolytic capacitor	C353, 507, 508 763, 770	5
KA25ST222J	Carbon resistor	R164, 202, 303 435, 501, 502 607, 608, 756	9	MS-10TW220M	Electrolytic capacitor	C406	1
KA25ST223J	Carbon resistor	R109, 161, 264 304, 305, 410 916	7	MS-10TW470M	Electrolytic capacitor	C157, 158	2
KA25ST224J	Carbon resistor	R203, 204, 363 621~628, 761	12	MS-16TW101M	Electrolytic capacitor	C156, 254, 301 959	4
KA25ST225J	Carbon resistor	R364	1	MS-16TW102M	Electrolytic capacitor	C769	1
KA25ST242J	Carbon resistor	R609, 610	2	MS-16TW470M	Electrolytic capacitor	C970, 971	2
KA25ST272J	Carbon resistor	R473, 474	2	MS-25TW100M	Electrolytic capacitor	C195, 255 305~307, 401 955, 956	8
KA25ST273J	Carbon resistor	R158, 159	2	MS-25TW101M	Electrolytic capacitor	C453, 454, 501 502, 601, 602 762	7
KA25ST274J	Carbon resistor	R113	1	MS-25TW221M	Electrolytic capacitor	C755, 756	2
KA25ST302J	Carbon resistor	R611, 612	2	MS-35TW100M	Electrolytic capacitor	C903	1
KA25ST303J	Carbon resistor	R619, 620	2	MS-35TW221M	Electrolytic capacitor	C753, 754, 904	3
KA25ST331J	Carbon resistor	R152~155, 262	5	MS-35TW222M	Electrolytic capacitor	C764	1
KA25ST332J	Carbon resistor	R108, 310~313 974	6	MS-35TW470M	Electrolytic capacitor	C757, 758, 773	3
KA25ST333J	Carbon resistor	R457, 458	2	MS-50TWR10M	Electrolytic capacitor	C953, 954, 958	3
KA25ST391J	Carbon resistor	R105, 151, 601 602	4	MS-50TWR22M	Electrolytic capacitor	C304, 957	2
KA25ST392J	Carbon resistor	R362	1	MS-50TWR47M	Electrolytic capacitor	C153~155 402, 951, 952	6
KA25ST393J	Carbon resistor	R409	1	MS-50TW1R0M	Electrolytic capacitor	C116, 151, 152 252, 308, 309 403, 404, 524 557, 760, 761	12
KA25ST433J	Carbon resistor	R507, 508	2	MS-50TW100M	Electrolytic capacitor	C778, 779	2
KA25ST470J	Carbon resistor	R101~103	3	MS-50TW2R2M	Electrolytic capacitor	C303	1
KA25ST471J	Carbon resistor	R104, 259, 453 454, 503, 504 613, 614, 711	9	MS-50TW3R3M	Electrolytic capacitor	C251, 253, 302	3
KA25ST472J	Carbon resistor	R471, 472, 551 633, 634, 910 971, 972	8	MS-50TW330M	Electrolytic capacitor	C902	1
KA25ST473J	Carbon resistor	R166, 308, 309 353, 402, 509 510, 639, 640 701, 912, 967	12	MS-50TW4R7M	Electrolytic capacitor	C207, 351, 901	3
KA25ST474J	Carbon resistor	R629, 630	2	MS-50TW470M	Electrolytic capacitor	C451, 452	2
KA25ST475J	Carbon resistor	R201	1	MS100TW470M	Electrolytic capacitor	C759	1
KA25ST514J	Carbon resistor	R515, 516	2	MS6R3TW222M	Electrolytic capacitor	C405	1
KA25ST561J	Carbon resistor	R641, 642	2	MS6R3TW470M	Electrolytic capacitor	C701	1
KA25ST562J	Carbon resistor	R263, 552, 553, 703~710	11	MY-50VS104J	Mylar capacitor	C617, 618	2
KA25ST563J	Carbon resistor	R160, 913~915	4	MY-50VS104M	Mylar capacitor	C461, 462	2
KA25ST564J	Carbon resistor	R955~959 962~964	8	MY-50VS153J	Mylar capacitor	C613, 614	2
KA25ST681J	Carbon resistor	R433, 434	2	MY-50VS182J	Mylar capacitor	C511, 512	2
KA25ST682J	Carbon resistor	R357	1	MY-50VS223J	Mylar capacitor	C615, 616, 905	3
KA25ST822J	Carbon resistor	R168, 412	2	MY-50VS273M	Mylar capacitor	C459, 460	2
KA50ST100J	Carbon resistor	R465~468	4	MY-50VS333J	Mylar capacitor	C266	1
KA50ST271J	Carbon resistor	R751~754	4	MY-50VS392J	Mylar capacitor	C609, 610	2
KA50ST391J	Carbon resistor	R917	1	MY-50VS393J	Mylar capacitor	C631, 632	2
SA-1WT122J	Metal oxide resistor	R960, 961	2	MY-50VS472J	Mylar capacitor	C611, 612	2
				MY-50VS473M	Mylar capacitor	C457, 458	2
				MY-50VS562J	Mylar capacitor	C513, 514	2
				MY-50VS563J	Mylar capacitor	C623, 624	2
				ST-50VS351J	Styrol capacitor	C201	1
				ST-50VS471J	Styrol capacitor	C314	1
				HC10SJZF473Z	Ceramic capacitor	C160~166, 203 261, 262, 317 352, 420, 411 427, 428, 523	17
				HE10SJZF473Z	Ceramic capacitor	C313	1
				HE40SJRH180K	Ceramic capacitor	C107	1
				HE40SJSLO20D	Ceramic capacitor	C101, 431	2
				HE40SJSLO30D	Ceramic capacitor	C102	1

CIRCUIT DIAGRAM (AMP.)



The schematic diagram illustrates the internal circuitry of the RCA 630-TS television receiver. It is a complex layout showing the interconnections between various electronic components, including vacuum tubes, resistors, capacitors, and other passive components. The diagram is organized into functional blocks, with labels for each component and connection points. The layout is a technical drawing for repair and assembly purposes.

Key components and sections visible in the diagram include:

- Power Supply Section:** Located at the top left, featuring a power transformer (P-100) and associated filtering components.
- Tuner Section:** Located in the upper middle, containing the 6X4 tuner tube and associated tuning circuitry.
- Detector and IF Amplifier Section:** Located in the center, featuring the 6X5 detector and IF amplifier tube.
- Video Amplifier Section:** Located in the lower middle, featuring the 6X6 video amplifier tube.
- Audio Amplifier Section:** Located at the bottom, featuring the 6X7 audio amplifier tube and associated audio output components.
- Control Section:** Located on the right side, featuring the 6X8 control tube and associated control circuitry.
- Rectifier Section:** Located at the bottom right, featuring the 6X9 rectifier tube.

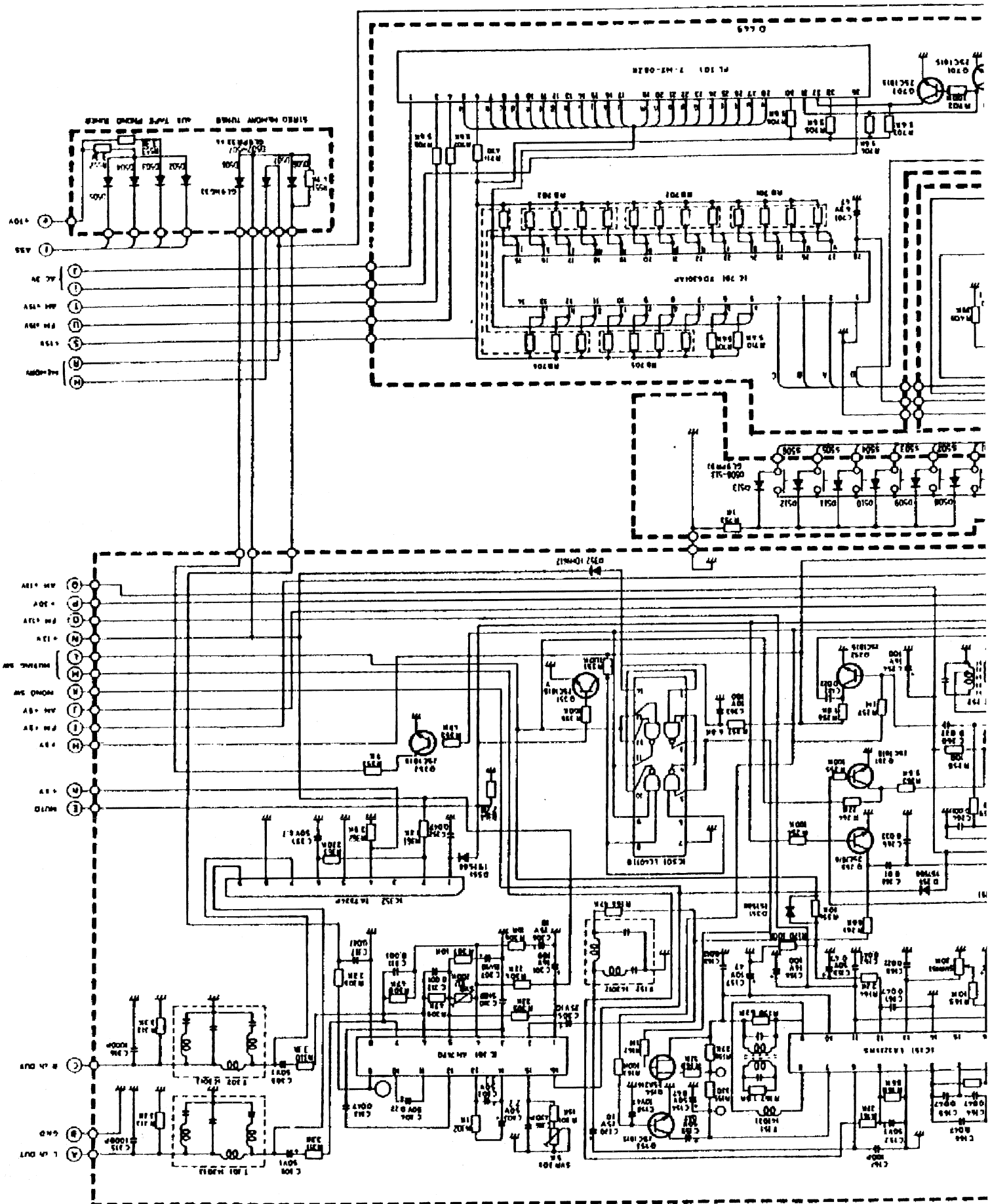
The diagram includes numerous labels for components, such as resistors (e.g., 10K, 100K, 1M), capacitors (e.g., .001, .01, .1), and vacuum tube sockets (e.g., 6X4, 6X5, 6X6, 6X7, 6X8, 6X9). It also shows various control points and test points for troubleshooting and repair.

PARTS LIST

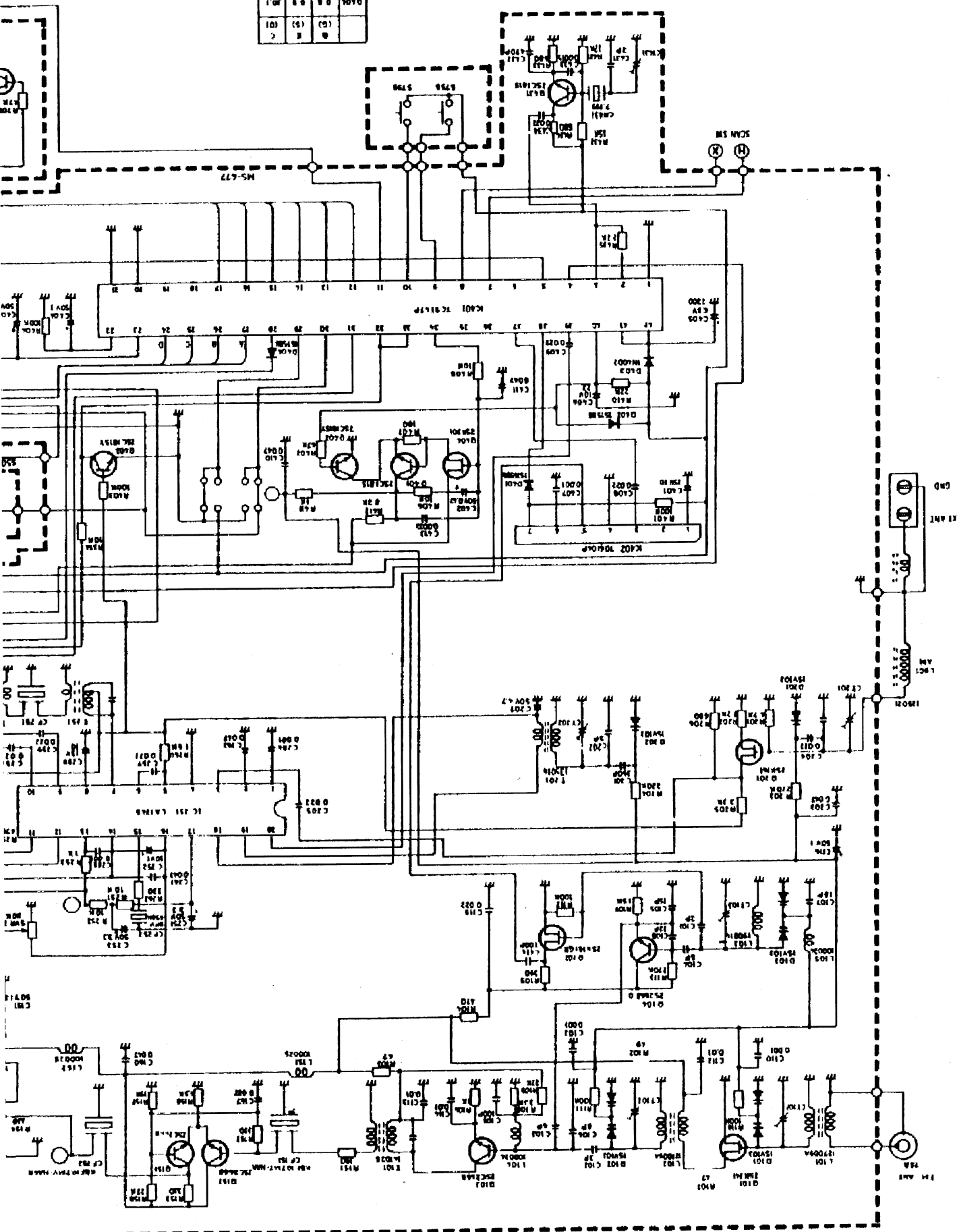
Part No.	Description	Symbol No.	Q'ty	Part No.	Description	Symbol No.	Q'ty
HE40SJSL050D	Ceramic capacitor	C202	1	N43241	Shield cover		1
HE40SJSL060D	Ceramic capacitor	C103	1	N43242	Shield plate		1
HE40SJSL080D	Ceramic capacitor	C104	1	N43502	Shield plate A		1
HE40SJSL180K	Ceramic capacitor	C106, 463, 464	3	N43503	Shield plate B		1
HE40SJTH150K	Ceramic capacitor	C105	1	N43058	Fittings		1
HE40SJTH220K	Ceramic capacitor	C108	1		(Headphone jack)		
HE40SJYB101K	Ceramic capacitor	C169, 414	10	N43379	Angle C (Switich)		1
		471~474, 479		N43047	Fittings A (P.C.B)		1
		480, 517, 518		N43380	Fittings A (P.C.B.)		1
HE40SJYB151K	Ceramic capacitor	C619, 620	2	N43381	Fittings B (P.C.B.)		1
HE40SJYB181K	Ceramic capacitor	C465, 466	2	N43382	Fittings C (P.C.B.)		2
HE40SJYB221K	Ceramic capacitor	C515, 516, 633	4	N43393	Angle (P.C.B.)		1
		634		N43375	Fittings F (Heat sink)		1
HE50SJSL101K	Ceramic capacitor	C109	1	N43376	Fittings R (Heat sink)		1
HE50SJYB102K	Ceramic capacitor	C110, 111, 256	10	N42887	Fittings (P.T.)		2
		264, 265, 311		N30675	Heat sink	for Q451~456	1
		312, 315, 316		N43501	Heat sink	for IC451, 452	1
		407		SH-1230	Heat sink	for Q752	1
HE50SJYB152K	Ceramic capacitor	C433	1	13823-6X9	Knob spacer		6
HE50SJYB222K	Ceramic capacitor	C521, 522, 525	4	N42886	Cabinet mat		1
		526		N43463	Universal spacer		12
HE70SJYB332K	Ceramic capacitor	C413	1	N43431	Shipping carton		1
HE70SJYF103Z	Ceramic capacitor	C112, 113, 114,	4	N21028	Packing pad		2
		263		N41318	Polyethylene bag		1
HE90SJSL471K	Ceramic capacitor	C432	1		(Unit)		
HE90SJSL511K	Ceramic capacitor	C310	1	N40487	Polyethylene bag		1
HE90SJYB562K	Ceramic capacitor	C425, 426	2		(Accessories)		
HE90SJYF223Z	Ceramic capacitor	C115, 167, 168	13	N43160	Label, serial number		2
		204, 205,		OM-388	Instruction manual		1
		257~260, 408		FT-003	FTZ sheet		1
		409, 412, 434		C-010	Circuit diagram		1
H11SEYF223Z	Ceramic capacitor	C765~768	10	TBB+30X08-Y	Tap screw B,		8
		771~776			Bind head, Y		
AT1-53-9	Trimmer capacitor	CT101, 102,	3	TPM+30X08-N	Tap screw P,		19
		201			Round head, N		
AT1-53-9W	Trimmer capacitor	CT202	1	TPS+30X08-N	Tap screw P,		3
CTZ51F147	Trimmer capacitor	CT431	1		Flat head, N		
CTZ81C122	Trimmer capacitor	CT103	1	TSB+30X06-N	Tap screw S,		9
ECQU2A103MF	Metallized film capacitor	C780	1		Bind head, N		
ACC-005	Line cord		1	TSB+30X06-Y	Tap screw S,		26
SR-3P-4	Cord stopper		1		Bind head, Y		
N10262	Front panel		1	TSB+30X08-Y	Tap screw S,		1
N43430	Display window		1		Bind head, Y		
N43097	Filter		1	TSB+30X10-Y	Tap screw S,		4
N21026A-8R	Cabinet		1		Bind head, Y		
N21049	Bottom board		1	TSB+40X08-N	Tap screw S,		4
NQ.7103	Foot		4		Bind head, N		
N21036	Rear panel		1	TSB+40X10-N	Tap screw S		4
N43240-8R	Knob (Tuning)		1		Bind head, N		
N43019-8R	Knob 31		4	TSB+40X14-Y	Tap screw S,		3
N30667-8R-6	Push button		1		Bind head, Y		
N43017-8R	Push button		14	TSC+30X06-Y	Tap screw S,		19
N30686	Side chassis R		1		Washer faced, Y		
N30687	Side chassis L		1	TSC+30X08-N	Tap screw S,		13
N21037	Center chassis A		1		Washer faced, N		
N30676	Center chassis B		1	2AWX0830-05-N	Plain washer, N		1
N209148	Support chassis (P.T.)		1	2AWX1040-08-N	Plain washer, N		4
N43437	Spacer		12	VJR-3	Snake lug		1
N43296	Shield cover		1	2AE-03	Solder lug		4
N42781	Shield plate		1	59BS1692	GND lug		5
N43052	GND plate A		1	59BS4795	Terminal lug		2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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02	42	02	
03	43	03	
04	44	04	



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